What is Claimed Is:

1. A method of modulating pupil dilation, comprising:

administering to an eye of a patient a formulation comprising a compound characterized by its ability to disrupt endogenous compounds which stimulate dilator muscles of the eye; and

allowing the formulation to remain in contact with the eye for a period of time and under lighting conditions where the dilator muscles would be stimulated in the absence of the formulation.

2. The method of claim 1, wherein the compound is an alpha 1 antagonist.

3. The method of claim 1, wherein the formulation further comprises a compound characterized by its ability to reduce eye redness.

4. The method of claim 3, wherein the compound characterized by its ability to reduce eye redness is tetrahydrazolene.

5. The method of claim 1, wherein the formulation is administered in an amount so as to optimize pupil diameter in dim light to no more than 5 mm and pupil diameter in bright light to no less than 1 mm.

6. The method according to claim 5, wherein said optimized pupil diameter in dim light is between and including 3 mm and 5mm.

7. A method for optimizing pupil diameter in dim light by minimizing its dilatation in response to less light, comprising administering a therapeutically effective amount of an alpha 1 antagonist to an eye of a person in need thereof.

8. The method according to claim 7, wherein said dilatation of the pupil diameter in dim light is minimized in response to less light compared with bright light, and wherein said method does not induce ciliary muscle contraction.

9. The method according to claim 10, wherein the eye is of a patient which suffers from excessively large pupils in dim light.

10. The method according to claim 9, wherein the patient suffers from poor quality of vision.

11. The method according to claim 7, wherein the eye is of a patient undergoing medication that results in dilatation of the pupil diameter.

12. The method according to claim 7, wherein the eye is of a patient that is naturally excessively dilated as a result of response to dimming of light.

13. A method of treatment, comprising:

subjecting the eye of a human patient to refractive surgery;

allowing the eye of the patient to recover; and

administering to the patient a formulation comprised of an alpha 1 antagonist wherein the formulation is a liquid formulation applied directly to the eye of the patient.

14. The method of claim 13, wherein the formulation is applied by means of an eye dropper.

15. The method of claim 13, wherein the refractive surgery is a surgical means selected from the group consisting of incision, laser ablation, and prosthesis implantation.

16. An ophthalmic, night vision formulation, comprising:

a sterile aqueous carrier; and

a therapeutically effective amount of a pharmaceutically active compound characterized by its ability to disrupt endogenous compounds which stimulate dilator muscles of a human eye.

17. The ophthalmic formulation of claim 1, wherein the compound which disrupts endogenous compounds which stimulate dilator muscles is an alpha 1 antagonist and the formulation further comprises tetrahydrazolene.

18. The formulation of claim 17, wherein the alpha 1 antagonist is selected from the group consisting of a phenoxybenzamine and a phentolamine.

19. The formulation of claim 17, wherein the alpha 1 antagonist is present in a concentration in a range of from about 0.01 milligrams per cubic centimeter of solvent to about 50 milligrams per cubic centimeter of solvent and wherein the solvent comprises an ophthalmic artificial tear solution.

20. An eyedropper, comprising:

a hollow cylindrical barrel comprising a first end, a second end, and an inner surface;

a means for providing suction to draw an aqueous formulation into the hollow cylinder barrel, the first end of the barrel configured to receive the means for providing suction to draw the formulation, the barrel having a small opening at the second end configured to permit passage of the formulation;

wherein the formulation comprises an aqueous solvent and a compound characterized by its ability to interfere with a biochemical reaction which results in stimulation of dilator muscles of a human eye.

21. The eyedropper of claim 20, wherein the inner surface of the barrel surrounds a volume of five cubic centimeters or less and the compound is an alpha 1 antagonist.